

REMARKS

This responds to the Office Action mailed on February 8, 2006.

No claims have been amended, canceled, or added. Claims 4, 6-8, 12-17, and 25-31 were previously withdrawn from consideration. Claims 1-17 and 25-31 are now pending in this application.

Information Disclosure Statement

Applicant submitted a Supplemental Information Disclosure Statement and a 1449 Form on March 23, 2004. Applicant respectfully requests that an initialed copy of the 1449 Form be returned to Applicant's Representatives to indicate that the cited reference has been considered by the Examiner.

§103 Rejection of the Claims

Claims 1-3 and 9-11 were rejected under 35 USC § 103(a) as being unpatentable over Marrs et al. (U.S. 5,355,283) in view of Lo et al. (U.S. 5,617,297). Applicant respectfully traverses the rejection and requests the Office to consider the following.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (M.P.E.P. § 2143 8th Ed, Rev.1).

The Office Action admits that Marrs does not teach fibers (Office Action at page 2, hereinafter, "Office Action"). The Office Action looks to Lo et al. to provide this lack of a teaching of a "fiber reinforced encapsulation material within the opening of said package core". (Claim 1). Lo et al. is applied to a completely different packaging technology in which a

PCMCIA card is entirely overmolded with a molding compound, except for the connector 120. The instant claims have the structural limitation that requires the fiber-reinforced encapsulation material to be “within the opening of said package core” (Claim 1). Because Lo has no core with an opening, this presents an impossibility, and Marrs has no fibers.

Claim 1 requires that the encapsulation material is present structurally “to hold said microelectronic die within said package core”, but Lo’s components 123 are already mounted and held to the printed circuit board 115 by other means. Therefore, Marrs would not look to Lo for assistance “to hold said microelectronic die within said package core”. Because the combination of Marrs with Lo appears to be possible only by using Applicant’s disclosure as a guide, withdrawal of the rejections is respectfully requested.

Regarding claims 2 and 3, the Office admits that neither Marrs nor Lo teach fiber lengths, let alone fiber aspect ratio. (Office Action at page 3). Applicant agrees. Applicant respectfully asserts that, for a claimed range to be obvious in view of a cited reference, the claimed ranges must ‘overlap or lie inside ranges disclosed by the prior art’. (Citing previous Office Action at page 4, quoting *In re Wertheim* (citation omitted)). Thus, because there are no “ranges disclosed by the prior art” e.g. Marrs and Lo, no *prima facie* case of obviousness has been established. The Office has invoked “critical nature” (Office Action at page 3), regarding claimed ranges, but critical nature is not a criterion of obviousness where no ranges are even proffered by the cited references. Consequently, the Office has used the Applicant’s disclosure as a guide instead of the cited references. Withdrawal of the rejections is respectfully requested.

Claim 5 was also rejected under 35 USC § 103(a) as being unpatentable over Marrs et al. and Lo et al., and further in view of Kato et al. (U.S. 6,282,352). Applicant respectfully traverses this rejection and requests the Office to consider the following.

The Office Action admits that neither Marrs nor Lo teach carbon fibers. (Office Action at page 4). The Office looks to Kato et al. to fill this deficiency. But since Lo et al. has nothing to do with what is claimed in claim 1 from which claim 5 depends, there is even less incentive to use Lo to look further to find Kato et al. Further, Kato et al. also has to do with forming an optical module, and particularly to the Office-cited columns 7 and 17 where a carbon fiber is taught, Kato is teaching how to build the “resin case” type package, that has nothing to do with

RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/854,539

Filing Date: May 14, 2001

Title: POLYMERIC ENCAPSULATION MATERIAL WITH FIBROUS FILLER FOR USE IN MICROELECTRONIC CIRCUIT
PACKAGING

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Dkt: 884.415US1 (INTEL)

the limitations of claim 1, let alone claim 5, which requires "a fiber reinforced encapsulation material within the opening of the package core" (Claim 1). Withdrawal of the rejections is respectfully requested.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney John Greaves at 801-278-9171, or the below-signed attorney at 612-349-9592, to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

INTEL CORPORATION ET AL.

By their Representatives,
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, Minnesota 55402
(612) 349-9592

Date April 10, 2006

By Ann M. McCrackin

Ann M. McCrackin
Reg. No. 42,858

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 10th day of April 2006.

Chris Hammond

Name

Chris Hammond

Signature